

July 2015

Pottawatomie County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

A total of 19 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Pottawatomie County economy.¹ These 19 sectors have a total direct output of approximately \$259 million and support 1,094.9 jobs in Pottawatomie County. Running the model for all 19 sectors simultaneously produces the following results:

Agriculture Contribution in Pottawatomie County

				% of Gross		% of Gross
		% of Total	Total	Regional		Regional
Impact Type ²	Employment	Employment	Value Added ³	Product ⁴	Output ⁵	Product
Direct Effect	1,094.9	7%	\$90,135,822	9%	\$258,602,667	25%
Indirect Effect	431.3	3%	\$25,699,039	2%	\$46,045,931	4%
Induced Effect	234.5	2%	\$14,869,349	1%	\$27,771,842	3%
Total Effect	1,760.7	11%	\$130,704,210	12%	\$332,420,440	32%

As shown in the above table, agriculture, food, and food processing supports 1,760.7 jobs, or 11% of the entire workforce in the county. These industries provide a total economic contribution of approximately \$332 million, roughly 32% of Gross Region Product (GRP). As noted below in the calculation of Gross Regional Product, imports and institutional sales are subtracted. Therefore, counties that import a relatively large amount of goods and services will have a reduced GRP which may lead to agricultural output being greater than GRP.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 19 agriculture, food, and food processing sectors is approximately \$131 million, or 12% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 12% of the total economy.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting: https://implan.com/index.php?option=com_content&view=category&id=19

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value Added = Labor Income + Indirect Business Taxes + Other Property Type Income

⁴ GRP = Final Demand of Households + Governments Expenditures + Capital + Exports - Imports - Institutional Sales

⁵ Output = Intermediate Inputs + Value Added

In the top ten by employment, Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming is the top employer in the agriculture industry with 328.3 employees. This table also shows the amount of jobs that are created by the agriculture industry in Pottawatomie County.

Top 10 Industries Affected by Employment

	Total	Total
Sector Description:	Employment	Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching		
and farming	328.3	\$54,663,791
Support activities for agriculture and forestry	189.5	\$7,439,708
All other crop farming		\$15,153,280
Grain farming		\$28,191,278
Veterinary services	109.0	\$5,533,459
Breakfast cereal manufacturing	73.4	\$64,897,256
Animal production, except cattle and poultry and eggs	64.6	\$4,207,683
Real estate	57.6	\$8,637,322
Wholesale trade	56.2	\$11,423,233
Landscape and horticultural services	52.6	\$2,788,734

The Breakfast cereal manufacturing industry directly contributes approximately \$65 million to Pottawatomie County's economy. This table also shows how much revenue is generated in other industries by having a strong agriculture industry.

Top 10 Industries Affected by Output

	Total	Total
Sector Description:	Employment	Output
Breakfast cereal manufacturing	73.4	\$64,897,256
Beef cattle ranching and farming, including feedlots and dual-purpose ranching		
and farming	328.3	\$54,663,791
Grain farming	125.3	\$28,191,278
Oilseed farming	20.2	\$28,159,324
Coffee and tea manufacturing	22.3	\$16,095,473
All other crop farming	185.8	\$15,153,280
Wineries	43.9	\$13,607,105
Other animal food manufacturing	8.8	\$12,832,928
Wholesale trade	56.2	\$11,423,233
Real estate	57.6	\$8,637,322

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture sector and the output they contributed to Pottawatomie County's economy.

Sector Description:	Employment	Output
Oilseed farming	20.2	\$28,159,324
Grain farming	125.3	\$28,191,278
Vegetable and melon farming	0.6	\$76,283
Tree nut farming		\$23,799
Greenhouse, nursery, and floriculture production	12.6	\$1,427,391
All other crop farming	185.8	\$15,153,280
Beef cattle ranching and farming, including feedlots and dual-purpose ranching		,
and farming	328.3	\$54,663,791
Dairy cattle and milk production	3.5	\$417,782
Poultry and egg production	26.0	\$8,277,815
Animal production, except cattle and poultry and eggs	64.6	\$4,207,683
Other animal food manufacturing	8.8	\$12,832,928
Breakfast cereal manufacturing	73.4	\$64,897,256
Bread and bakery product, except frozen, manufacturing		\$1,348,074
Frozen cakes and other pastries manufacturing		\$123,085
Coffee and tea manufacturing		\$16,095,473
Wineries	43.9	\$13,607,105
Sawmills	3.6	\$778,128
Veterinary services	109.0	\$5,533,459
Landscape and horticultural services	52.6	\$2,788,734

All 105 counties in Kansas have IMPLAN models with an agriculture contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Kansas, the retail sector was omitted.